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BUCHANAN, INGERSOLL & ROONEY PC  
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EXAMINER

MANCHO, RONNIE M

ART UNIT

PAPER NUMBER

3664

NOTIFICATION DATE

DELIVERY MODE

02/09/2009

ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

ADIPFDD@bipc.com

<b>Office Action Summary</b>	<b>Application No.</b> 10/813,264	<b>Applicant(s)</b> ITO ET AL.	
	<b>Examiner</b> RONNIE MANCHO	<b>Art Unit</b> 3664	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 05 November 2008.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-6 and 9-15 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-6 and 9-15 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>2, 2008; 4, 2008</u> .  | 6) <input type="checkbox"/> Other: _____                          |

**DETAILED ACTION**

***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 11/05/08 has been entered.

***Priority***

2. It is noted that this application appears to claim subject matter disclosed in prior Application No. JP 2003-093977, filed 3/31/03. A reference to the prior application must be inserted as the first sentence(s) of the specification of this application or in an application data sheet (37 CFR 1.76), if applicant intends to rely on the filing date of the prior application under 35 U.S.C. 119(e), 120, 121, or 365(c). See 37 CFR 1.78(a). For benefit claims under 35 U.S.C. 120, 121, or 365(c), the reference must include the relationship (i.e., continuation, divisional, or continuation-in-part) of all nonprovisional applications. If the application is a utility or plant application filed under 35 U.S.C. 111(a) on or after November 29, 2000, the specific reference to the prior application must be submitted during the pendency of the application and within the later of four months from the actual filing date of the application or sixteen months from the filing date of the prior application. If the application is a utility or plant application which entered the national stage from an international application filed on or after November 29, 2000, after compliance with 35 U.S.C. 371, the specific reference must be submitted during the

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pendency of the application and within the later of four months from the date on which the national stage commenced under 35 U.S.C. 371(b) or (f) or sixteen months from the filing date of the prior application. See 37 CFR 1.78(a)(2)(ii) and (a)(5)(ii). This time period is not extendable and a failure to submit the reference required by 35 U.S.C. 119(e) and/or 120, where applicable, within this time period is considered a waiver of any benefit of such prior application(s) under 35 U.S.C. 119(e), 120, 121 and 365(c). A benefit claim filed after the required time period may be accepted if it is accompanied by a grantable petition to accept an unintentionally delayed benefit claim under 35 U.S.C. 119(e), 120, 121 and 365(c). The petition must be accompanied by (1) the reference required by 35 U.S.C. 120 or 119(e) and 37 CFR 1.78(a)(2) or (a)(5) to the prior application (unless previously submitted), (2) a surcharge under 37 CFR 1.17(t), and (3) a statement that the entire delay between the date the claim was due under 37 CFR 1.78(a)(2) or (a)(5) and the date the claim was filed was unintentional. The Director may require additional information where there is a question whether the delay was unintentional. The petition should be addressed to: Mail Stop Petition, Commissioner for Patents, P.O. Box 1450, Alexandria, Virginia 22313-1450.

If the reference to the prior application was previously submitted within the time period set forth in 37 CFR 1.78(a), but not in the first sentence(s) of the specification or an application data sheet (ADS) as required by 37 CFR 1.78(a) (e.g., if the reference was submitted in an oath or declaration or the application transmittal letter), and the information concerning the benefit claim was recognized by the Office as shown by its inclusion on the first filing receipt, the petition under 37 CFR 1.78(a) and the surcharge under 37 CFR 1.17(t) are not required.

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Applicant is still required to submit the reference in compliance with 37 CFR 1.78(a) by filing an amendment to the first sentence(s) of the specification or an ADS. See MPEP § 201.11.

### ***Claim Objections***

3. Claim 12 is objected to because of the following informalities: In claim 1, applicant is advised to change “one of *a the* process” to -- one of the process -- or clarity. Applicant is encouraged to make similar corrections to the other claims that may need a similar correction.

Appropriate correction is required.

### ***Claim Rejections - 35 USC § 112***

4. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

5. Claims 1-6, 9-15 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Amended claim 1 recites, “means for determining whether the obtained road bank angle is greater than a predetermined value or not, *wherein the predetermined value is greater than zero*”. The phrase, “*wherein the predetermined value is greater than zero*” is new matter.

Applicant’s fig. 11 step 1125 show that Gy must be greater than Gyst and in addition that CANT

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must be greater than CANTref before starting a process for restraining a roll angle of a vehicle from increasing. CANT is understood to refer to applicant's claimed "road bank angle". And CANTref is understood to be the claimed *predetermined value* as disclosed in applicant's specification page 26 last section to page . Applicant points to page 29, line 21 to page 30, lines 24 as disclosing the limitation. It is noted that there is no support or teaching in the disclosure for the claimed "*wherein the predetermined value is greater than zero*".

The rest of the claims are rejected for depending on a rejected base claim.

### ***Claim Rejections - 35 USC § 102***

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

7. As Best Understood, claims 1, 2, 9, 10, 11, 12, 13, 14, 15 are rejected under 35 U.S.C. 102(e) as being anticipated by Lu et al (7003389).

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Regarding claim 1, Lu et al (figs. 1-6; abstract; col. 3, lines 40-67; col. 4, lines 34-67; col. 5, lines 29-67; col. 6, lines 1-27; col. 6-12) disclose a control device for a vehicle comprising:

means 64 (col. 7, lines 57-60; fig. 5) for obtaining a road bank angle (fig. 3B; col. 5, line 46; col. col. 7, lines 65 to col. 8, line 8; col. 10, lines 64; col. 11, line 7) of a road surface, on which a vehicle runs in the vehicle body roll direction (figs. 3B; col. 5, lines 29-51; col. 7, lines 65 to col. 8, line 11);

means 26 (figs. 4A&B, the processor does multiple steps) for determining whether the obtained road bank angle is greater than a predetermined value or not (*i.e. road bank angle is greater than zero, col. 5, lines 46-51; col. 7, lines 65-col. 8, line 11*); and

means 26 (figs. 4A&B, the processor does multiple steps) for starting a specific process for preventing a roll angle of the vehicle from increasing (*i.e. vehicle is prevented from rolling over, by applying brakes, controlling steering, suspension, etc; col. 5, lines 46-51; col. 6, lines 14-20; col. 7, line 65 to col. 8, line 10; col. 10, lines 20-24; col. 12, lines 51-62*) based on a determination that the obtained road bank angle is greater than the predetermined value (*i.e. road bank angle is greater than zero, col. 5, lines 46-51; col. 7, lines 65-col. 8, line 11*); and

means 26 (figs. 4A&B, the processor does multiple steps) for stopping the specific process based on a determination that the obtained road bank angle is smaller than or equal to the predetermined value.

*The road bank, angle  $\theta_{bank}$  in fig. 3B, col. 5, lines 46-51 is compared to the threshold zero. The bank angle has to be greater than zero to cause or increase a roll over tendency of the vehicle (known as off-camber divergent state). In col. 7, lines 65 to col. 8, line 11, roll stability*

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*is executed during a divergent roll condition such (an off-camber divergent state, fig. 3B; col. 5, lines 46-51).*

*In another scenario the road bank, angle  $\theta_{bank}$  is illustrated in col. 10, lines 64, equation (5). Now, equation (5) is used in equation (14), col. 12, line 56. Based on equation 14 rolling over i.e. roll over of the vehicle is prevented thus preventing the vehicle from rolling over when the road bank, angle  $\theta_{bank}$  is greater than zero (col. 5, line 45-51). The roll over prevention process is stopped if the conditions are not met ). That is, in col. 7, lines 65 to col. 8, line 11, roll stability is executed only during a divergent roll condition such (an off-camber divergent state, fig. 3B; col. 5, lines 46-51) when the bank angle has to be greater than zero .*

Regarding claim 2, Lu et al (figs. 1-6; abstract; col. 3, lines 40-67; col. 4, lines 34-67; col. 5, lines 29-67; col. 6, lines 1-27) disclose the control device for a vehicle claimed in claim 1, wherein the means for road surface obtaining road bank angle of the road surface is provided with:

means (sensors 20; col. 6, line 58-67) for obtaining motion state quantity showing a motion state of the vehicle (col. 6, lines 28-67);

means 58 for calculating, as an estimated lateral acceleration, an estimated value of a lateral acceleration (col. 7, lines 37-52) that is a component of the acceleration exerted on the vehicle in the lateral direction of the vehicle body (i.e. direction when the vehicle body is rolling over on the incline, fig. 2), based upon the obtained motion state quantity (col. 6, lines 58-67, fig. 4; col. 7, lines 37-39); and



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a lateral acceleration sensor 32 for obtaining the actual value of the lateral acceleration as an actual lateral acceleration by detecting the value of the component of external force exerted on the vehicle in the lateral direction of the vehicle body (col. 6, lines 37-67, fig. 4); wherein

the means 64 for obtaining a road bank angle of the surface is configured to obtain the road bank angle based upon the result of the comparison between the calculated estimated lateral acceleration 58 and the obtained actual lateral acceleration 32 (*col. 7, lines 29-36 indicates that a relative roll angle as shown in fig. 2 is obtained as a result of comparison between calculated estimated lateral acceleration 58 and actual lateral acceleration 32. Now, col. 10, lines 2-10; col. 10, lines 46 to col. 1, and fig. 2 indicates that if all four wheels of the vehicle are on the ground, then the road bank angel is the same as relative roll angle*).

Regarding claim 9, Lu et al (figs. 1-6; abstract; col. 3, lines 40-67; col. 4, lines 34-67; col. 5, lines 29-67; col. 6, lines 1-27) disclose the control device for a vehicle claimed in claim 1, wherein the means for starting the specific process is configured to start at least one of a process for producing an alarm (i.e. flag, col. 9, lines 36-48) and a process for decelerating the vehicle as the specific process (applying brakes, col. 6, lines 11-21; col. 12, lines 8-11, lines 59-62).

Regarding claim 10, Lu et al (figs. 1-6; abstract; col. 3, lines 40-67; col. 4, lines 34-67; col. 5, lines 29-67; col. 6, lines 1-27) disclose the control device for a vehicle claimed in claim 2, wherein the means for starting the specific process is configured to start at least one of a process for producing an alarm (i.e. flag, col. 9, lines 36-48) and a process for decelerating the vehicle as the specific process (applying brakes, col. 6, lines 11-21; col. 12, lines 8-11, lines 59-62).

Regarding claim 11, Lu et al (figs. 1-6; abstract; col. 3, lines 40-67; col. 4, lines 34-67; col. 5, lines 29-67; col. 6, lines 1-27) disclose the control device for a vehicle claimed in claim

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10, wherein the process for decelerating the vehicle includes a process for producing braking force on the wheels of the vehicle by a brake fluid pressure regardless of an operation of a brake pedal (applying *active* brakes, col. 6, lines 11-21; col. 12, lines 8-11, lines 59-62).

Regarding claim 12, Lu et al (figs. 1-6; abstract; col. 3, lines 40-67; col. 4, lines 34-67; col. 5, lines 29-67; col. 6, lines 1-27) disclose the control device for a vehicle claimed in claim 10, wherein

one of the process for producing an alarm (i.e. flag, col. 9, lines 36-48) and a process for decelerating the vehicle (applying brakes, col. 6, lines 11-21; col. 12, lines 8-11, lines 59-62) as the specific process is executed depending upon an amount of time (col. 8, lines 58 to col. 9, line 5; col. 10, lines 1-24; col. 11, line 60, col. 12, lines 30) during the obtained road bank angle continues to be greater than the predetermined value, the specific process being changed to the other of the process for producing an alarm and the process for decelerating the vehicle in sequence as the amount of time, during which the obtained road bank angle continues to be greater than the predetermined value increases (the equations in the prior art shown in columns 10-12 vary with time and thus anticipate the limitation).

Regarding claim 13, Lu et al (figs. 1-6; abstract; col. 3, lines 40-67; col. 4, lines 34-67; col. 5, lines 29-67; col. 6, lines 1-27) disclose the control device for a vehicle as in claim 1, wherein the specific process executing means is configured to start the specific process when the obtained road bank angle itself becomes greater than the predetermined value, and when a vehicle body speed is not less than a predetermined vehicle speed (col. 9, line 30 shows roll speed for movement greater than a zero velocity when executing roll over suppression; col. 7,

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lines 29-67 further shows that the accelerations used for roll over suppression are computed using velocity).

Regarding claim 14, Lu et al (figs. 1-6; abstract; col. 3, lines 40-67; col. 4, lines 34-67; col. 5, lines 29-67; col. 6, lines 1-27) disclose the control device for a vehicle as in claim 1, wherein the means for starting a specific process starts one of a plurality of specific processes for preventing the roll angle of the vehicle from being excessive depending upon an amount of time during which the obtained road bank angle continues to be greater than the predetermined value (col. 8, lines 58 to col. 9, line 5; col. 10, lines 1-24; col. 11, line 60, col. 12, lines 30), the specific process being changed to another of the plurality of specific in sequence as the amount of time, during which the obtained road bank angle continues to be greater than the predetermined value increases (the equations in the prior art shown in columns 10-12 vary with time and thus anticipate the limitation).

Regarding claim 15, Lu et al (figs. 1-6; abstract; col. 3, lines 40-67; col. 4, lines 34-67; col. 5, lines 29-67; col. 6, lines 1-27) disclose the control device of claim 1, wherein the means for obtaining a road bank angle of the road surface is configured to obtain the road bank angle when the vehicle is running substantially straight (col. 10, 11, 12 show that a steering is used to turn the vehicle to prevent roll over especially when the vehicle is turning, thus vehicle is moving substantially straight). Further, fig. 1 of Lu shows a vehicle moving substantially straight.

***Claim Rejections - 35 USC § 103***

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. AS best understood, Claims 5, 6, are rejected under 35 U.S.C. 103(a) as being unpatentable over Lu et al (7003389)

Regarding claims 5 and 6, Lu et al (figs. 1-6; abstract; col. 3, lines 40-67; col. 4, lines 34-67; col. 5, lines 29-67; col. 6, lines 1-27) disclose the control device for a vehicle, wherein the means for obtaining motion state is configured so as to obtain the wheel speed of each wheel of the vehicle as the motion state quantity, and the means for calculating an estimated lateral acceleration is configured to calculate the estimated lateral acceleration based upon the a combination of wheel speed signals (col. 6, lines 58-61; col. 7, lines 37-38).

In addition, In claim 6, LU teach calculating the estimated lateral acceleration based upon average of wheel speeds (col. 6, lines 58-61; col. 7, lines 37-38).

Lu et al did not particularly mention calculating the estimated lateral acceleration based upon the difference between the wheel speed of the wheels at the left side of the vehicle body and the wheel speed of the wheels at the right side of the vehicle body.

However, calculating the estimated lateral acceleration based upon the difference between the wheel speed of the wheels at the left side of the vehicle body and the wheel speed of the wheels at the right side of the vehicle body (also to include front left and rear left wheels; front right and rear right wheels) is a well known process and would be obvious to substitute one

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well known process for calculating acceleration with another well known process for calculating acceleration as a matter of design choice to obtain the benefits associated therewith. KSR Int'l.

Co. v. Teleflex Inc., 550 US 398, -, 127S.Ct. 1727, 1741 (2007).

10. As Best understood, Claim 3, 4, are rejected under 35 U.S.C. 103(a) as being unpatentable over Lu et al (7003389) in view of Aga et al (2002/0087235A1).

Regarding claim 3, Lu et al (figs. 1-6; abstract; col. 3, lines 40-67; col. 4, lines 34-67; col. 5, lines 29-67; col. 6, lines 1-27) disclose the control device for a vehicle claimed in claim 2, wherein the means for obtaining the road bank angle of the road surface is configured to obtain the road bank angle based upon the calculated estimated lateral acceleration and the obtained actual lateral acceleration. Lu did not particularly mention difference in acceleration. However, Aga (section 0056, 0093, 0107, 0109) teach of obtaining a road bank angle (roll angle) based upon a difference between the calculated estimated lateral acceleration and the obtained actual lateral acceleration.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Lu as taught by Aga for purposes distinguish between a trip-over caused by an impingement of a wheel over a curb.

Regarding claim 4, Lu et al (figs. 1-6; abstract; col. 3, lines 40-67; col. 4, lines 34-67; col. 5, lines 29-67; col. 6, lines 1-27) disclose the control device for a vehicle claimed in claim 2, wherein the means for executing a specific process is configured to start the specific process when the obtained road bank angle becomes greater than the predetermined value, and using the value of the obtained actual lateral acceleration and the value of the calculated estimated lateral acceleration (col. 7, lines 29-67). However, Aga (figs. 6-13) teaches of that a means for

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executing a specific process is configured to start the specific process when an obtained road bank angle becomes greater than a predetermined value, and when a value of the obtained actual lateral acceleration is greater than the value of the calculated estimated lateral acceleration (see particularly flow charts in fig. 6 and 12 and the sections related thereto).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Lu as taught by Aga for purposes distinguish between a trip-over caused by an impingement of a wheel over a curb.

### ***Response to Arguments***

11. Applicant's arguments filed 11/05/08 have been fully considered but they are all not persuasive.

Applicant's requests that the IDS dated Feb. 28, 2008 and April 22, 2008. The documents have been considered and forwarded with the present office action.

Applicant has put the claims in proper 112 means plus function format. The 112 second rejections thereto have been vacated.

Applicant's cancellation of the terms "only", "itself" overcomes the 112 first rejection thereto.

Applicant's amendment to claim 12 overcomes the 112 first rejection thereto.

Applicant argues that The prior art Lu does not disclose a road surface angle. The examiner disagrees and notes that the argument is not convincing because applicant's fig. 4 shows a vehicle on an incline and refers to it as a road surface angle. In a similar manner Lu fig. 2 disclose the claimed angle.

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Applicant further argues that in Lu the threshold is not greater than zero. The examiner disagrees and notes that Lu col. 5 anticipates the limitation. Applicant's invention fails to disclose the claimed threshold greater than zero.

Applicant further argues that Lu fails to disclose a stop process. The examiner notes that the argument is not convincing. In Lu, Roll over suppression is executed only when the conditions are met, implying that when the conditions are not met, the process is stop as disclosed by the algorithm in LU.

Applicant further argues that the prior art does not teach the limitations in the claims. The examiner disagrees and notes that applicant agreed that the claims were not in proper form and agreed to amend the claims. The discussions during the interview were not convincing. It is noted that LU (figs. 1-6; abstract; col. 3, lines 40-67; col. 4, lines 34-67; col. 5, lines 29-67; col. 6, lines 1-27) disclose the control device for a vehicle claimed in claim 2, wherein the means for starting the specific process is configured to start at least one of a process for producing an alarm (i.e. flag, col. 9, lines 36-48) and a process for decelerating the vehicle as the specific process (applying brakes, col. 6, lines 11-21; col. 12, lines 8-11, lines 59-62).

Further Lu discloses the means for obtaining a road bank angle of the road surface is configured to obtain the road bank angle when the vehicle is running substantially straight (col. 10, 11, 12 show that a steering is used to turn the vehicle to prevent roll over especially when the vehicle is turning, thus vehicle is moving substantially straight). Further, fig. 1 of Lu shows a vehicle moving substantially straight.

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Applicant further argues that the prior art does not disclose obtain road bank angle, “comparing the *road bank angle* with a predetermined value”. And further that the prior art does not disclose that, “when *the road bank angle* is greater than a predetermined value, the system starts a specific process for preventing a roll angle of the vehicle from becoming excessive.

The examiner respectfully disagrees. Applicant is referred to col. 7, lines 57 to col. 8, lines 11. Lu discloses a module for obtaining road bank angle.

The road bank, angle  $\theta_{\text{bank}}$  in fig. 3B, col. 5, lines 46-51 is compared to the threshold zero. The bank angle has to be greater than zero to cause or increase a roll over of the vehicle (known as off-camber divergent state). In col. 7, lines 65 to col. 8, line 11, roll stability is executed during a divergent roll condition such (an off-camber divergent state, fig. 3B; col. 5, lines 46-51).

In another scenario the road bank, angle  $\theta_{\text{bank}}$  is illustrated in col. 10, lines 64, equation (5). Now, equation (5) is used in equation (14), col. 12, line 56. Based on equation 14 rolling over i.e. roll over angle of the vehicle is prevented thus preventing the vehicle from rolling over when the road bank, angle  $\theta_{\text{bank}}$  is greater than zero (col. 5, line 45-51).

These sections anticipate comparing road bank angle with a threshold and states that if the road bank angle is greater than the threshold, zero a process for stopping the vehicle from rolling over (i.e. roll angle of vehicle is restrained as claimed) vehicle is started

It is believed that the rejections are proper and thus stand.



*Communication*

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to RONNIE MANCHO whose telephone number is (571)272-6984. The examiner can normally be reached on Mon-Thurs: 9-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tran Khoi can be reached on 571-272-6919. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Ronnie Mancho  
Examiner  
Art Unit 3664

2/2/2009

/Ronnie Mancho/  
Examiner, Art Unit 3664